Risk of venous stenting across the inguinal ligament on occlusion of great saphenous vein

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Disclosure

Speaker name: Houman Jalaie

I have the following potential conflicts of interest to report:

- [x] Consulting
  - Medtronic, BARD, Optimed, Ab Medica, Bentley, BTG

- [ ] Employment in industry

- [ ] Stockholder of a healthcare company

- [ ] Owner of a healthcare company

- [ ] Other(s)

- [ ] I do not have any potential conflict of interest
Introduction
Aim of the study

What does happen to GSV as a main tributary of CFV which is covered with dedicated venous stents?
Material and methods

- Retrospective, single centre Study

- Patients from December 2014 – December 2016 with PTS extending below ostia of GSV (DUS and MRV)

- Patients with patent GSV without reflux before the operation (evaluated by DUS and MRV)

- Follow Up with DUS
DUS findings

Covered GSV

CFA

Stent in CFV

Covered GSV
DUS findings

Covered GSV
## Material and methods

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of patients</td>
<td>78</td>
</tr>
<tr>
<td>No. of limbs</td>
<td>86</td>
</tr>
<tr>
<td>Age</td>
<td>41 (18-66)</td>
</tr>
<tr>
<td>Gender</td>
<td>51 (65.4 %) female</td>
</tr>
<tr>
<td>Side of pathology</td>
<td>left 49 (62.8%)</td>
</tr>
<tr>
<td></td>
<td>right 21 (26.9%)</td>
</tr>
<tr>
<td></td>
<td>both 8 (10.3%)</td>
</tr>
<tr>
<td>Endophlebectomy of CFV</td>
<td>15 (17.4 %)</td>
</tr>
<tr>
<td>Stents used</td>
<td>Sinus Venous 70 (81.4%)</td>
</tr>
<tr>
<td></td>
<td>Venovo 16 (18.6%)</td>
</tr>
<tr>
<td>Follow up</td>
<td>20 (5-36) months</td>
</tr>
</tbody>
</table>
## Results

### Duration of the operation (min)

| Mean ± SD   | 121 ± 53.4 |

### Length of stented segment (mm)

| mean ± SD   | 218.3 ± 71.2 |

### Occlusion of GSV during FU

| n (%)       | 3 (3.5%) |

### Patency rates of the reconstruction

| Primary patency | % | 75% |
| Assisted primary patency | % | 84% |
| Secondary patency   | % | 91% |

### Patency of covered GSV

| % | 96.5% |
Patency rates
Conclusion

- Open reconstruction >>>> patent GSV
- Covering the tributaries below the ligament will not cause an occlusion of these veins using dedicated venous stents
- The reason might be the good porosity of the used venous stents
- It might be safe to cover the ostia of the DFV if needed
- Further studies are needed to answer the question of hemodynamic changes of flow in covered tributaries
Thank you for your attention

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